

**NEW HOST RECORDS (FAMILY ASCLEPIADACEAE) FOR
EUPLOEA CORE CORINNA (W.S. MACLEAY) (LEPIDOPTERA:
NYMPHALIDAE) IN QUEENSLAND**

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Abstract

Marsdenia rostrata R. Br., *M. microlepis* Benth., *M. glandulifera* C. White, *M. coronata* Benth. and *M. viridiflora* R. Br. are recorded as host plants for *Euploea core corinna* (W. S. Macleay).

Introduction

Taxonomic revisions of the Asclepiadaceae that occur in the Australasian region are currently being prepared by the author. During the course of field work and from observations on plants in cultivation, a number of instances of oviposition, feeding and pupation of the Australian crow or oleander butterfly, *Euploea core corinna* (W. S. Macleay) have been recorded. The following new host records are in addition to those given by Scheermeyer & Zalucki (1985) and Forster (1987). All botanical vouchers are deposited at the Queensland Herbarium (BRI). No vouchers were kept of the butterflies with identifications being made from the description in Common & Waterhouse (1981).

Host plants

1. *Marsdenia glandulifera* C. White: Cultivated plants (Voucher: Forster 3158) at Rainworth (27°28'S, 152°59'E). Oviposition, feeding and pupation to adults observed, April-May, September-November 1988.
2. *Marsdenia coronata* Benth.: Wild plants (Voucher: Bird s. n.) at New Chum (27°36'S, 152°50'E). Larval feeding (V instar) observed in January 1988.
3. *Marsdenia rostrata* R. Br.: Cultivated plants (Voucher: Forster & Orford 2728) at Rainworth (27°28'S, 152°59'E). Oviposition, feeding and pupation to adults observed, April-May, September-November 1988.
4. *Marsdenia viridiflora* R. Br.: Wild plants (Voucher: Forster & Bolton 3711) 1.3 km N of Yarraman Ck, Charters Towers to "New Victoria Downs" Homestead road (20°26'S, 146°13'E). Larval feeding (V instar) observed, March 1988.
5. *Marsdenia microlepis* Benth.: Wild plants (Voucher: Forster & Bolton 3712) 0.5 km NW of "Doongara" Homestead (20°34'S, 146°28'E). Larval feeding (V instar) observed, March 1988.

Discussion

These species of *Marsdenia* all grow within the known distribution range of *E. core* (Common and Waterhouse 1981). None has previously been recorded as a host plant for this butterfly. While the oleander butterfly feeds on a wide range of Asclepiadaceae, ovipositing adults may ignore some taxa (e.g. certain taxa of *Hoya* R. Br., Forster 1987) or the larvae may not survive on others (Kitching and Zalucki 1983, Rahman et al. 1985). As outlined by Kitching and Zalucki (1983) mere observation of larval feeding on a particular plant species does not necessarily mean that the plant is a preferred host or that normal adults may result from pupation. In this respect several of the species listed by Forster (1987) and the records for *M. coronata*, *M. viridiflora* and *M. microlepis* require further observations to confirm successful pupation of larvae to adults. The contribution of these native species of *Marsdenia* to the population dynamics of this butterfly are worth further investigation.

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References

- COMMON, I. F. B. and WATERHOUSE, D. F. 1981. *Butterflies of Australia*. xiv + 682 pp. Angus and Robertson, Sydney.
- FORSTER, P. I., 1987. New host records for *Euploea core corinna* (Macleay) (Nymphalidae). *Journal of the Lepidopterists' Society* 40: 354-355.
- KITCHING, R. L. and ZALUCKI, M. P. 1983. A cautionary note on the use of oviposition records as larval food plant records. *Australian Entomological Magazine* 10: 64-66.
- RAHMAN, H. U., ZALUCKI, M. P. and SCHEERMEYER, E. 1985. The effect of host plants on the development and survival of the immature stages of *Euploea core corinna* (Lepidoptera: Nymphalidae). *Journal of the Australian Entomological Society* 24: 95-98.
- SCHEERMEYER, E. and ZALUCKI, M. P. 1985. Food plant records of *Euploea core corinna* (W. S. Macleay) with some notes on larval coloration. *Australian Entomological Magazine* 11: 87-90.